

LISTING OF CLAIMS:

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Currently amended) An expendable container comprising:

an expendable tank configured to store an expendable and having a piezoelectric sensor element attached thereto;

a driving circuit configured to ~~charge and discharge~~energize and de-energize the piezoelectric sensor element;

a detection signal generation circuit configured to generate a detection signal including cycle information representing a cycle of an output voltage wave of the piezoelectric sensor element after the driving circuit ~~charges and discharges~~energizes and de-energizes the piezoelectric sensor element; and

a control module configured to control at least one of an impedance of a ~~discharge~~de-energizing circuit through which the piezoelectric sensor element ~~discharges~~de-energizes and a ~~discharge~~de-energizing time so as to be a certain level that reduces a noise element present in detecting the cycle information of the detection signal, wherein

the cycle information is available for determining whether a residual quantity of the expendable is greater than a preset level, and

the control module is ~~capable of varying a discharge characteristic~~configured to vary a property affecting an output signal of the piezoelectric sensor element.

2. (Currently amended) The expendable container in accordance with claim 1,

wherein the control module is ~~capable of varying~~configured to vary a ~~discharge~~de-energizing time constant of the piezoelectric sensor element.

3. (Currently amended) The expendable container in accordance with claim 1,
wherein the control module is ~~capable of varying~~configured to vary a ~~discharge~~de-energizing time of the piezoelectric sensor element.

4. (Currently amended) The expendable container in accordance with claim 1,
wherein

the detection signal generation circuit comprises:

a voltage generation circuit configured to generate a predetermined potential difference between a first terminal with a higher potential and a second terminal with a lower potential;

the piezoelectric sensor element having one end connected to the second terminal;

a ~~charge~~de-energization control switch connected between the first terminal and the other end of the piezoelectric sensor element, and configured to control on and off ~~charging~~de-energizing from the first terminal to the piezoelectric sensor element according to a control output from the control module;

a ~~discharge~~de-energization control switch connected between the other end of the piezoelectric sensor element and the second terminal, and configured to control on and off ~~discharging~~de-energizing from the piezoelectric sensor element to the second terminal according to the control output from the control module; and

a resistive circuit connected between the other end of the piezoelectric sensor element and the second terminal, and having a variable resistance, wherein

the control module is configured to control the on-off of the ~~charge~~energization control switch, the on-off of the ~~discharge~~de-energizing control switch, and the resistance of the resistive circuit.

5-13. (Canceled)